

Flexibility in airline business models with core competence as an indicator

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Abstract

The airline industry is often unstable and unpredictable forcing airlines to restructure and create flexible strategies that can respond to external operating environmental changes. In turbulent and competitive environments, firms with higher flexibility perform better and the value of these flexibilities depends on factors of uncertainty in the competitive environment. A model is sought for and arrived at, that shows how an airline business model will function in an uncertain environment with the least reduction in business performance over time. An analysis of the business model flexibility of 17 Airlines from Asia, Europe and Oceania, that is done with core competence as the indicator reveals a picture of inconsistencies in the core competence strategy of certain airlines and the corresponding reduction in business performance. The performance variations are explained from a service oriented core competence strategy employed by airlines that ultimately enables them in having a flexible business model that not only increases business performance but also helps in reducing the uncertainties in the internal and external operating environments.

Keywords: Airline business models, Business model flexibility, Airline core competence

Introduction

Few concepts in business today are as widely discussed and as seldom systematically studied as business models, with very few large-scale systematic empirical studies. In this paper, the normative question of how airlines can and should continuously adapt their business models to improve their performance is being addressed. It should also show the improvements and reduction in performance caused by the variable adoption of flexible practices in their business models by certain airlines. The airline industry is often unstable and unpredictable forcing airlines to restructure and create flexible strategies that can respond to external operating environmental changes. In turbulent and competitive environments, firms with higher flexibility perform better and the value of these flexibilities depends on factors of uncertainty in the competitive environment. In the Darwinian evolutionary race, it is not necessarily the strongest that survive but the most adaptable.

The construct of flexibility in business models

The researcher's perception of reality and the nature of knowledge originates from the philosophical assumptions that underlie their research and that tends to lead them to the adoption of certain research methods (Puxty, 1993, Hopper & Powell, 1985). The philosophical and theoretical assumptions adopted in this research falls within the functionalist perspective of sociology by Burrell and Morgan (1979). This category puts forward the view that social world consists of constructs and abstract relationships that can be identified, studied and measured objectively. The functionalist approach

suggests the view that the continued existence of a construct like flexibility and abstract relationships like business models depends on its usefulness to society. If these constructs and abstract relationships cease to be useful and perform its function in society, it will not survive in its present form. It is because from a functionalist perspective, they function in a desired manner, because that suits the particular social system. If for any reason they fail in future to suit the social system they function in, it will either lead to a breakdown of the organization or will have to adapt for continued survival (Puxty, 1993).

In times of rapid change, uncertainty and turbulence, the relationships between the business organization and its environment changes. A functionalist perspective emphasizes the need for the organization to be aware and responsive to change in the environment in order to survive. The functional logic that drives the organization should be flexible, timely, readily accessible, accurate, and compatible with other systems in both cross-functional and cross-organizational capacities. It has been argued that as uncertainty increases, companies are finding themselves facing a high ratio of uncertainty to knowledge, as decisions are based on old assumptions leading to unfortunate outcomes (Mcgrath & MacMillan, 2009). Clearly, it is possible to infer that the company operating a traditional business model (for example a full service carrier like Alitalia) struggles to remain competitive. According to Eriksson & Penker (2000), one can identify options for change and improvement by studying business models.

The role of core competence in business model flexibility

A business model is the underlying logic of a company by which it creates value. In their definition of business models, Chesbrough and Rosenbloom (2002) emphasize the connections a business model provides between a company's potential and the realization of economic value. Flexibility is the ability and capacity to reposition resources and functions of the organization in a manner consistent with the evolving strategy of management as they respond, proactively or reactively, to change in the environment (Koornhof, 2001). Flexibility requires the availability of resources and the effective synchronization of these limited variables to benefit from a new opportunity. This requisite translates in to the need for a company to have the required competencies. The competencies that have been acquired have to be assimilated and strengthened. Strengthening core competencies strategically positions airlines by the enhanced flexibility so that opportunities can be acted on as the industry evolves. This will also explain the difference in quality among airlines that follow the same business model.

Although industry transformations generally emanate from technological changes, recent examples suggest they may also be due to the introduction of new business models and nowhere is it more relevant than in the airline industry (Vlaar, Vries & Willenborg, 2005). In the past, different types of airline business models could be clearly separated from each other. However, according to Nair, Palacios and Ruiz (2010), this has changed in recent years partly due to the concentration process and partly due to the reaction caused by competitive pressure.

Research methodology

In conducting this research, a literature survey on flexibility, core competencies and business models in the airline industry was undertaken. The research aim is to discover or develop new ideas and not to test preconceived ones. The research is mainly of a deductive nature where examples are used to explain the nature of the various phases of uncertainty, flexibility and adaptability and to demonstrate the application of these in the airline business model framework using a core competence perspective.

Perception-based measurements are chosen for analyzing the core competence of airlines. This is useful as some of the performance benefits from core competencies are intangible or qualitative in nature and are therefore not available as objective measures. Most of the data items are strategic in nature and are obtained from archival sources like strategy documents, regulatory agencies, trade magazines, airline websites, and governmental agencies. Perceptual measures have been widely used in almost all the behavioral oriented business and management disciplines. This study relies on subjective “perception-based” measures at both the process and organizational level which can cause common method bias. The use of data like CEO's perceptions was considered appropriate because most of the data required to measure business processes performance and competencies are intangible or qualitative in nature and would be difficult, if not impossible, to collect objectively. Such information that is in-principle objective, especially at the organizational level is of strategic importance and highly confidential and therefore not openly shared. The perceptions and corporate intent were corroborated with historical airline performance and business outcomes in an effort to discount serious threats to the quality of the data from perceptual measures. These comparative techniques help overcome the common method bias in perception based research methods.

The core competence measurements are compared with the product and service quality ranking from Skytrax averaged over the last five years. The Skytrax ranking is widely accepted in the airline industry (Tsantoulis & Palmer, 2008), and can be used as an appropriate proxy for measuring airline service quality. The Skytrax rating indicates the service quality on a one-to-five scale, with five being the best evaluation and is available open source on the website. The Skytrax rating includes all parameters used in the SERVQUAL model of measuring service quality (Parasuraman, Zeithaml, & Berry, 1985), a model recently applied in the airline industry (Tiernan, Rhoades, & Waguespack, 2008). The assumption of constant quality has its limitations. But since the service level is presumably a reflection of the business model, stability over time is most likely to be the case for most airlines.

The notion of flexibility in airline industry

Airlines have faced cyclical loss and profits throughout their history. Many airlines have come out of the crisis's faced by them by adopting flexible business practices. But these business practices once successful will lead the company in to complacency guided by profits in the short and medium term and thus developing a myopic situation as to the needs for further flexibility in the future.

Most airline business models use a linear approach having a typology which shows the model at a point in time. The profitability of an operating model is constantly at risk due to technology innovations, regulatory changes, customer preferences, and competition. The annual business model appraisals that companies make are out of place in the ever evolving business scenario. There should be inherent qualities in the business model that makes it respond to uncertainty and diminishing business performance by adapting to the factors that contribute to it. This means acquiring or changing the competencies that made the model inefficient. This adaptation can be sustainable if the model is flexible enough to continuously assimilate and strengthen the acquired competencies.

A model is developed which can address these problems. Figure: 1 shows how a business model will function in an uncertain environment with the least reduction in business performance over time. This is achieved by the introduction of an inherent layer of flexibility and adaptability in the business model that will constantly be used to analyze, benchmark, acquire and strengthen the required competencies needed to maintain or excel the business performance of the airline. In most business models, the business performance decrease drastically and may lead to failure when uncertainty arises from external competitor, environmental threats and from internal existential threats and conflicts. In

a flexible business model, the business performance decreases as uncertainty increases, but not drastically as this uncertainty phase is overcome by constant flexible business practices and to a smooth adaptation phase by the acquiring of required competencies that can overcome the uncertainty in the business model. The business performance increases as the acquired competencies are strengthened and assimilated in to the business model due to the ingrained flexibility.

The model to function requires the constant analysis of the airline's core competencies, and finds the weaknesses by benchmarking with the industry. This kind of constant appraisal requires a companywide mindset which is less about systems planning and more about people. Service orientation which means the constant lookout for identifying and offering the best services for the customers will result in such a system to be developed. This is shown to be the case as is explained in the following sections where we discuss about the competencies based on service orientation.

The competencies which are lacking as found from the analysis are to be acquired and integrated in to the business model framework. This is espoused in the adaptation phase of the model where the required competencies are acquired. This is further explained below with examples from the airline industry where airlines have tried to acquire the required competencies. The adaptation phase will only provide protection from imitation by competitors attracted to the marketplace success as distinctiveness can wear off fast. The competencies can be adapted, enhanced and continuously revamped only if the company has an overarching holistic principle of flexibility built in to the basic logic of its existence. This can only be achieved by a business model built on the basics norms of flexibility and evolution in a continuous cyclic manner.

The acquired competencies should be strengthened by a smooth integration in to the business model framework of the company with limited friction arising from the integration. This will again require a management with an open mindset and ability to change. The effect of these phases on the business performance is shown in the model by the varying thickness of the section portraying business performance. Performance decreases as uncertainties set in and a reduction in performance is experienced until the business model is fortified with the competencies gained.

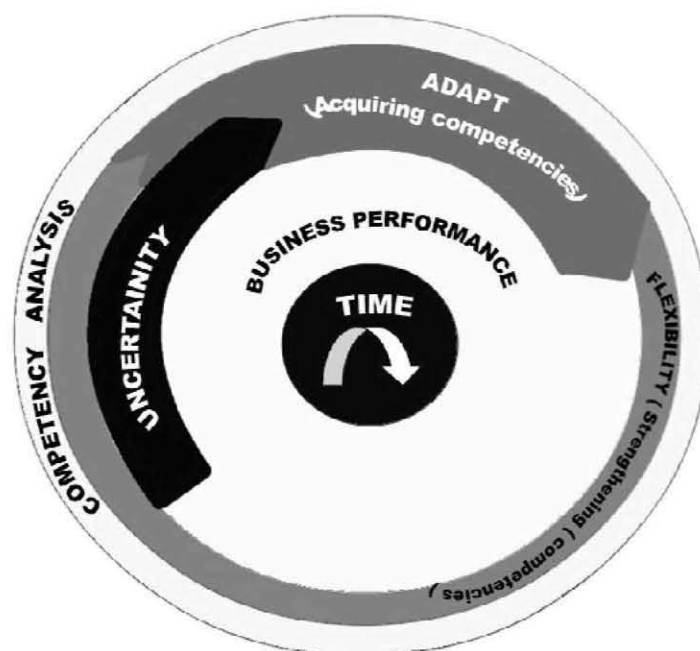


Figure: 1 The flexible business model

Adopting a cyclic business performance appraisal inherent in the business model will enable the business performance to fall back to growth levels in the case of threats from uncertainty. Airline business models that perform high use many methods to overcome the uncertainty and keep the model dynamic and thus avoid predictability. Lesser the time companies take to overcome the uncertainty phase and acquire and strengthen the competencies can mean success from failure as it can avoid imitation by competitors attracted to the marketplace success as distinctiveness can wear off fast.

An analysis is done to identify some of the competencies that airlines have tried to acquire, that had an impact on their business performance, and thus added flexibility in evolving their business model.

- Brand Maintenance

Airlines with a good brand presence invest in advertising to maintain or increase their brand's appeal particularly in competitive markets lest face the risk that the brand be perceived to have faded away. India's leading airline, Kingfisher, has set up a full-fledged formal presence on Twitter the social media website. This initiative will make it easier for anyone to receive instant updates from Kingfisher Airlines and thus, opens up a new platform for the brand to actively converse with its guests. With the introduction of this service, Kingfisher Airlines joins a growing global band of savvy marketers who have recognized the power and reach of new media like the social and community networking.

Instead of marketing individual products, product lines, or even brands, a firm builds up a corporate brand that embraces the entire product or service offerings and provides the firm more marketing flexibility and market entry options because the corporate brand stretches over products and markets. Singapore International airlines (SIA) always feature in its advertisements, the renowned SIA Girl when introducing new destinations, new aircrafts, new cuisine on board or brand new seats and video services. This is because the bottom line for Singapore International airlines is not the plane, the seat, the video or the destination, but delivering quality service and the "SIA Girl" is the brand identity.

- Brand restructuring

In 2010, Turkish Airlines is Europe's fastest growing airline and has doubled their total revenue in the last four years. But the airline's image used to be disreputable. They were known for poor service and had a shocking safety reputation. In a move to overhaul their fleet and offer passengers the ultimate travel experience, Turkish Airlines in 2010 revealed a brand new image for their firm. With new logo, livery, and aircraft interiors, the flagship airline for Turkey hopes that the new look will help them compete with global firms. They have also considerably increased their advertising budgets particularly in new markets. Of its \$US70 million advertising budget for 2010, the airline had allocated \$US30 million to promoting its Bangkok Australasian hub. For the Scandinavian Airlines, part of the SAS Group, brand restructuring as envisioned in their strategy 2011 plan, aim is greater attention to the group's core business and finding suitable forms of business and means of delivery for those operations that do not help develop the SAS Group's core activities. The solutions involve structural measures as well as efforts to reduce costs which are motivated by the SAS Group's financial position, where a business model based on financial flexibility will be of major importance in managing future restructuring measures and investment.

- Product diversification

Diversification is based on the theory that there is so much randomness in the world to create an edge based on skillfulness and thus is a strategy to regress to the mean. United Airlines had earlier started the car rental and hotel booking services to utilize the synergies between those businesses and air travel as they were related to travel. Diversification is common in the airline industry as they enlarge the customer base be it to the other aviation players in the form of maintenance services and catering

or other sectors like air cargo. The creation of big airline groups such as the International airlines group by the British Airways and Iberia have added to such diversification in the industry. A small airline company can diversify by adding flights in obscure cities that competitors have overlooked. A pioneer airline's product flexibility allows it to adjust its product strategies in response to the late entrant's entry. LAN airlines with a diversified product offering with an equally diversified geographic base has flexibility in its business model which enables the airline to deploy and rotate capacity according to the market conditions affecting the different sectors and locations where the airline operates. The airline's geographic diversification allows it to handle its operations efficiently, maximize asset utilization while creating synergies between passenger and cargo operations. All these unique features which are difficult to reproduce by competitors enable LAN airlines to maintain very high load factors of 78% in the passenger and 70% in its cargo divisions.

- New market penetration

This is a common strategy employed in the airline industry by penetrating in to markets hitherto catered to by competition. It can be difficult for airlines especially as they penetrate a market as a new brand in a new market. The addition of new routes may even call for a business model change for airlines if taken unaware in terms of market penetration and the reaction from competitors especially if they don't have a flexible business model. The flexibility will help in delivering value, differentiate and thus endear to the new customer base or the existing ones flying on a new route. The right brand with the best ability to adapt to the different cultural environments with the right marketing and distribution abilities will ultimately flourish in the new markets. Jet Airways, Kingfisher, Airasia, Ryanair have all translated their strong domestic or regional footing with a strong brand and customer base to start operations to a new accessible international destination. They were successful because they were able to overcome the complexities that arise such as local operational and customer service requirements, business and commercial practices, legal and regulatory requirements etc. But if these successes were only based on the experience gained from long term presence at the home market with manageable competitors, launching new regional routes etc, the brand will not succeed due to problems in the translation of its core competencies to the needs of the new market.

- Incremental innovation

Incremental innovation is the constant technological or process changes that lead to improved performance of products and services. Airlines were constantly looking for incremental innovations aimed at improving the customer journey. Singapore International airlines (SIA) is a company that looks actively to reduce costs (SIA, 2011), it still maintains its marginal value to customers. This is achieved with small incremental innovations, as well as sustained differentiation from its competitors. Singapore Airlines has a Product Innovation Department that does research on why people behave in a certain manner. The department studies their reactions and then makes a three-to-five year projection of what is likely to happen, so that they can better understand the customer needs. Some of this research has led to the development of internet and phone check-in for all classes, and the full-size Space Bed. SIA is an airline that introduces innovations and keeps a close watch on the competition always striving to achieve growth through practices even borrowed from other service industries like banking, hotel industry, retailing etc. They were pioneers in introducing amenities like free drinks, headsets, onboard fax machines, individual video screens and telephones, "book the cook" service for special meals in first and business classes, fax and e-mail check-in, innovative cargo facilities etc.

- Consolidation

Mergers are common across industries when consolidation happens for survival and in the airline industry, it provides the full service carriers with a market-driven solution for restructuring to compete with the established market share of low-cost business model. Network management and

elaboration of the existing networks have become necessary due to less differentiation in airline industry caused by the ease of availability of advanced aircrafts and the required financing in terms of leasing. To overcome the regulatory opposition to mergers in many countries, airlines developed strategic alliances like Sky team and One world as bigger competitive units. All the global alliances that emerged in the times of consolidation started their existence in Europe as the market was more deregulated than in other areas (Oum & Zhang, 2000). The formation of alliances can also be traced to this paradigm of the need to consolidate. Consolidation improves financial performance, gain economies of scale, acquire market share, create synergies and access to new tools in research and development.

- Service augmentation

As the core becomes perfected in the eyes of the customer, competitive pressures force organizations to offer additional benefits which manifest itself as the augmented product (Mudie & Pirrie, 2006). A good example of augmentation is the introduction by British Airways of a speech recognition service to improve the efficiency of their customer flight and confirmation services while making it easier and more pleasant for customers to access flight information (Kotler, 2005). The services that an airline offers will vary in how much they need or resort to augmentation. As the differentiation in airline industry becomes more and more vague, most of the competition will take place in service augmentation. Again the flexible business practices play an important role in service augmentation as rigid structures do not go that extra mile in exceeding the customer expectations. Augmentation makes a service competitive and differentiates it from the competition.

- Sales augmentation

Criticism has been made of the airline industry for its increasing fine-tuning of segmentation and combinations of fares, rules and conditions, only to find that 60 to 80 per cent of these products never generated a single sale of a seat to a customer (Duneavy & Westermann, 2004). Airlines are finding that dealing with multiple sales outlets like travel websites are not translating in to increased bookings. Southwest Airlines, for example, only makes its fares available on its website. Airlines like American, Delta etc are cancelling their association with travel websites like Expedia and Orbitz. Airlines like American are moving towards more customization in sales with their new "Direct Connect" platform which they claim will provide customers access to customized choices, rather than use traditional distributors such as Amadeus and Sabre.

- First mover

South African airlines consider first mover advantage as their primary core competence. The airline has the competitive advantage that it is among the few earlier entrants in the airline industry and in South Africa it has the first mover advantage. This is most relevant for airlines entering in to the virgin markets in developing countries. An airline which is the first to enter an unchallenged market space will have a significant brand value creating a high exogenous entry barrier. Imitating them will involve huge costs and organizational changes. Therefore, on account of high brand value attained by the first mover advantage, they enjoy a competitive sustainable position.

- Disruptive innovation

Using lower price, limited features, ease of use or increased convenience, the upstart meets a need overlooked by larger incumbents. Potential customers who were infrequent users embrace the easier, cheaper or self-service alternatives and increase total consumption. Ryanair Offered low-price, point-to-point flights. Incumbent airline companies like British Airways saw no threat to their higher quality services. As Ryanair improved in quality, and as people started noticing Ryanair's low prices, a new standard in the air travel market was created. Ryanair is now more utilized than British Airways. Speed to market, responsiveness to consumer need or customization makes a disruptive innovation

compelling and creates a unique product/service. The lack of flexibility in strategic planning and budgeting is the most common obstacle to disruptive innovation faced by airlines. Disruptive innovations generate more flexibility, are cost-effective and have a wider applicability and usually outperform what they replace.

- Commoditization

Airlines migrate from business models which are based on innovation to preference models which emphasize value-in-use such as brand appeal, ease-of-use, service, and reliability. As travelers have begun to think of their airline seats as a commodity, where quality takes a back-seat to price, airlines move toward low-cost operations management models. The scenario in which price has moved from a major consideration to the only consideration for passengers; it pays the airline business model to evolve to price centric.

- Globalization

From the perspective of the airline industry, globalization implies joining an alliance or to form independent strategic partnerships. Both approaches can work equally well. It can also lead to mergers like those between Delta Airline and Northwest Airlines to create the world's largest airline which was followed quickly by the merger of United Airlines and Continental Airlines which shows the impact of globalization. The airline needs a broad range of marketing competencies to go global and at the same time anticipate and respond to the threat from incumbent competition. Fleet optimization, financing or budgeting for new routes, market analysis etc which used to be the traditional methods employed by airlines to go global is now part of standard industry practices. The real difference comes not in the numbers of projected profits and market space but in how much the airline is flexible enough to practice the art of consumer marketing outside its comfort zone. For the incumbents, it means adapting to the new practices in the changed market that the competition brings, forcing strategic shifts in channel focus, pricing, branding and product.

- Value chain

According to Porter (1985) value chain is a systematic way of examining all the activities a firm performs and how they interact is necessary for analyzing the sources of competitive advantage. Value activities which are a part of the value chain are the discrete building blocks of competitive advantage. Without defining them carefully it is not possible to compare and contrast them with those of competitors and thus seek ways of attaining competitive advantage. Rival airlines may have similar value chains, but they may also have very different ones. Porter quoted the example of a low cost airline, People Express and United Airlines, a full service carrier. They were both in the same business, but there were significant differences in the way that, for example, they ran their boarding-gate operations, their aircraft operations and their crews. Porter claimed that differences such as these are a major source of competitive advantage.

Airlines add value to their core corporate offering through services. According to Neil Mills the chief executive officer of SpiceJet, full-service carriers may find it easier to move a product down the value chain rather than scale up (Outlook Business, 2011). Passengers simply get used to paying less for more. The Economist (1997) had quoted the then chief executive officer of British Airways' Robert Ayling about his plans to turn BA into a "virtual airline", contracting out activities like catering, engineering and maintenance, other than the actual sale of tickets and the handling of flights. By this he hoped to slash £1 billion off BA's cumulative operating costs by 2000. Since employees account for 30% of costs, many jobs are either to be hived off to contractors or downgraded. But this plan did not happen and BA still remains a full service carrier.

Information Technology has played a key role in airline value addition often with radical process changes. Porter (1990) has written about the transformation from the traditional top-down,

hierarchical, keiretsu based inter-organizational type of collaboration which has been competitive advantage of Japanese industries. It is clear that this type of collaboration has been very effective in the past, but today it is not fast enough to rely on this exclusively. This type of inter-organizational cooperation has to be augmented with IT-based inter-organizational systems creating virtual value-chains facilitating non-hierarchical communication. This has been implemented by Japan Airlines (JAL) and main effect has been on the transformation of the physical value chain including the core firm (JAL) and its network partners. Chatfield and Anderson (1997) had analyzed the implementation of this process in which a virtual value chain is developed, which is information-based and beyond the confines of the traditional keiretsu-based information exchange. This virtual value chain gives rise to JAL's improved customer services, improved value chain logistics coordination, increased competitiveness, and increased sales.

- **Service orientation**

Singapore International Airline's focus on service is apparent from its mission statement and core values that establish without question that quality service to customers is a fundamental objective and aspiration of the airline. Every major concern, query or decision can be considered through the prism of this commitment to provide world-class customer service. SIA makes a concerted effort to stay in touch with customers through in-flight surveys, customer focus groups and rapid reply to every compliment or complaint they receive. SIA consolidates this input with other key figures to create a quarterly "Service Performance Index" that is closely watched throughout the airline. Some airlines run employee incentive schemes that rely on input from customers so that frequent fliers can dole out points to the best flight attendants.

The core competencies in airline business models

Core competence is the unique property of an organization or company (Prahalad & Hamel, 1990). Core competency of an airline is largely dependent upon its industrial, social and cultural background. Nunes & Breen (2011) has commented on the problems faced by companies when their core markets begin to stagnate and they are reduced to managing to the limits of their existing business operations instead of identifying new business opportunities. According to them, companies fail to reinvent themselves not necessarily because they are bad at fixing what's broken, but because they wait much too long before repairing the deteriorating bulwarks of the company.

The airline just like any other business makes up a system in which there are a set of functions, departments etc that should work in a synchronized manner. Strengthening core competencies will lead to profits for the airline only if the whole system functions in a way that nourishes the competencies. Without this framework, even if an airline strengthens the core competence or core strength, it will still be blocked from business performance by limiting factors like low integration, lack of will in implementation, failure to organize based on competencies etc. The business model approach when integrated with the proper core competency strategies will aid in overcoming these shortcomings that the airline may face. But for this, the business model itself should be aligned to the core competencies of the airline. The following section looks in to a scenario where the business model is organized around service orientation.

Competencies based on service orientation

The increasing importance and growth of services as a major global industry (Shugan, 1994) have made companies redefine their businesses with a service orientation. There is a consensus that economic growth, a higher disposable income and technological advances have contributed to the rapid growth of service-sector enterprises (Mattsson, 1995; Patterson, 1995), and have substantially

increased their economic importance. According to Gronroos (2006), today firms compete on the basis of services, and not on the basis of physical products. The competitive advantage of services has become increasingly evident, as there is little to differentiate competing products from the customer's perspective. This is more relevant in the case of airline industry, as the product (the air transportation of passengers) minus the service competence is all the same with the technology, means of transportation (the aircrafts and airports), factors such as safety, maintenance, reservation systems etc remain almost the same across the industry with standards set by the aircraft manufacturers and regulating authorities in most cases. With the advent of the information age and the fast paced developments in technology, the dependence on human interaction to provide services has decreased. Technology has to be used as a means for providing service rather than a means in itself. Quality of technology innovation per se is of limited significance in today's highly competitive and evolving business environment. It is the value of these technological innovations as perceived by the customer that makes a product succeeds in the long run.

Service is not created just by the supplier and the customer but by a network of activities involving a host of stakeholders (Gummesson, 2008). This will enable the firm to realize its core competence, which is represented by the knowledge base, strengthened by the internal and external partnerships utilizing the technologies incorporated.

For service orientation to set in, the basic question of "what does the customer value" should be answered. Service orientation does not mean elaborate services, rather customer focused service. The service should be consistent and in line with customer needs and perceptions. Innovative service realignment by airlines should not mean a reduction in service orientation. Disruptive innovations with a customer focus do not mean a reduction in quality. It is important to make a distinction between those airlines for whom service is part of the overall offer and those for whom service is the offer as the latter exhibit particular characteristics that merit attention. Airlines have spent their focus on product development efforts like the latest flight entertainment systems or new kind of seats and at the same time ignoring the fact that customers are more concerned about the service oriented aspects of their travel which are more intangible. The airlines that take these service oriented factors while designing their business models, where every major issue, question or decision can be considered through the prism of this commitment to providing world-class customer service always excel in their business performance.

Need to identify required airline competencies

For a functioning flexible business model as shown in Figure: 1 to evolve, the airline should have defined, strengthened and set priorities and operating models based on its core competencies. Core competence is the essential feature that determines the business model of an airline. Defining core competence would help us in combining the core activities with the non-essential activities within an airline in an efficient manner. And it's this term that distinguish each airlines from the other. Why it is that Delta Express suffered a mere existence while Southwest has thrived the brutal environmental and social scenarios that they were subjected to. It was their approach to their core competencies, attitude and relationship with people that decided their future. Considering the above events, it is appropriate to define core competency in airline industry as the collective capabilities of an airline, to coordinate different resources so as to provide the best service in a cost effective way with the maximum benefit.

This study about airline business models and market trends necessitates the need to analyze the effect of these factors on the airlines' service and quality levels. The analysis of the business model flexibility of 17 Airlines from Asia, Europe and Oceania is done with core competence as the

indicator. This analysis focuses on the business model flexibility with the aspects of responsiveness to customer needs and market changes, efficiency of the operations and processes that lead to better services and generates growth. The importance that the airlines place on the service model and technology is analyzed.

Based on study of the perceived competencies of airlines, the data obtained can be used to measure and classify the core competencies of specific airlines. In Figure 2, a threefold classification is used, based on two dimensions, of any airline's competencies. The classification is based on the perceived core competencies by the airline and that has been identified consistently throughout in corporate strategy, implementation, and resource allocation for the past five years.

Along the Y-axis is the ranking of airlines on the basis of the delivered front-line Product and Service quality derived from the ranking listings of industry review bodies such as Skytrax.

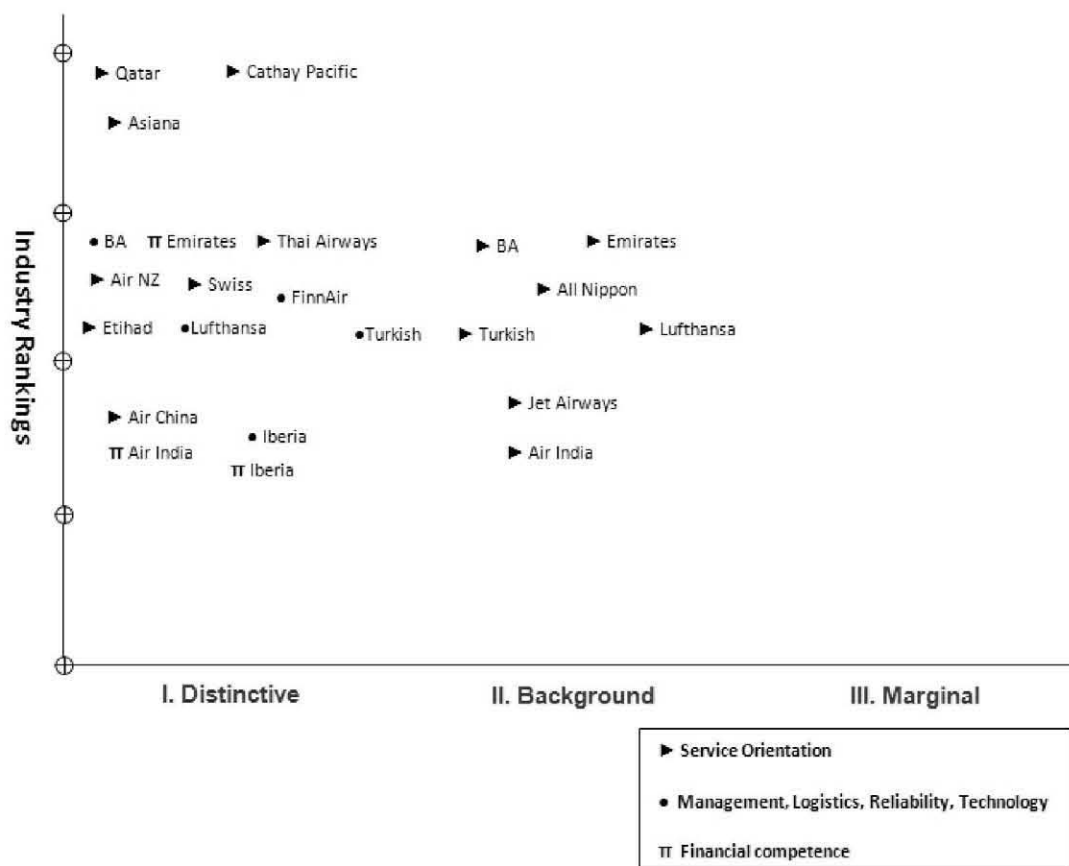


Figure: 2

The core competencies of the airlines are classified in to distinctive competencies, background competencies and marginal competencies. The distinctive competencies should command both high shares of corporate resources and a strong revealed advantage as compared to the competition. The marginal competencies take only a small proportion of the corporate resources and without a strong competitive position. The background competencies are those which command high share of corporate resources, but do not contribute to an advantage over competition.

The analysis (figure 2) shows that airlines which consider service orientation to be their primary distinctive competency consistently rank higher in industry airline rankings based on product and services. These are often airlines like Asiana Airlines or Qatar Airways which are relatively new.

New airlines have an advantage over existing carriers in terms of implementing strategies to bring flexibility because they are devoid of legacy indebtedness or an out of date business model (Wensveen and Leick, 2009). Generally Asian airlines are relatively younger than their European counterparts. Asian airlines predominantly consider service as their distinctive core competence while most European airlines consider service to be their background core competence.

The airlines that consider their managerial skills, logistical capabilities, reliability in operations, adopting latest technologies etc do not rank high or often come in average score categories in industry rankings. Many European airlines like British Airways, Finn Air, Lufthansa etc consider implementation of latest technology, business knowledge, managerial skills of top management, flight availability, logistics, IT services etc to be their distinctive core competency. Technology act as a differentiating factor for a short span of time, but when all industry players start providing the same solutions, differences becomes vague. For example, advances like in-seat flight entertainment systems that were considered cutting edge in the 1990's have become common industry practice now. The benefits of such progress are transitory and innovations are swiftly replicated by competitors and as market penetration increases, customers come to expect these innovations. Active engagement and continuous improvement are required to keep satisfying the customer expectations and if these factors are missing, the innovators will be left behind in a dynamic industry.

There is yet another group of airlines like Air India, Iberia (particularly state owned or recently privatized) that consider financial management and financial competence to be their distinctive competency. Change management, difficult in the most adaptive organizations, tends to be far more arduous in corporations that have government as the sole or majority shareholder (Doppelt, 2003). This is the primary reason for those airlines with traditional governmental share holding to be inefficient in providing a service oriented model.

One of the patterns that emerge from the analysis is the service and product quality difference between Asian and European airlines and the constraints placed by flexible models and proper core competency strategies. Asian airlines predominantly consider service as their distinctive core competence while European airlines consider technology and management skills as distinctive core competence.

To be flexible based on service orientation can be the way out for airlines which are facing stagnation due to limits of their business model as well as external factors. Examples can be found in the airline industry of such trends taking place particularly among the low cost airlines which are facing diminishing load factors and saturated markets. Easyjet which is primarily caters to the budget traveler is trying to transform its low cost business model by positioning itself to the business traveler by the introduction of practices like passenger loyalty schemes, priority boarding, flights to primary airports, flexible tickets whose date can be changed as often as desired from one week before until three weeks after the original date of travel etc. These kind of flexible practices based on service orientation are increasingly becoming evident in the airline industry.

Conclusion

The main aim of this paper had been to study the core competence strategies of airlines and how it defines their business model thereby affecting their business performance. An attempt has been made to develop a cyclic model to show how an airline can increase its business performance in an uncertain environment by bringing in flexibility based on competencies to its business model.

The airline industry has traditionally experienced uncertainty throughout its existence and has come out of it through some innovative and flexible strategies employed by the successful among them. There have been many failures as exemplified and it shows us the need for the industry to take up flexible practices particularly when it comes to business models, to operate efficiently in the ever random industry scenario of the present. It is seen from the analysis of airlines that many of them do not understand the concept of choosing the right competencies to operate in the given environments. A correct understanding of the concept of business models, employing the right core competencies, organizing them effectively and building the business model around the competencies that are constantly gained and assimilated can result in enhanced business performance.

The airline competencies can be adapted, enhanced and continuously revamped if the company has an overarching principle of flexibility built in to the basic logic of its existence. This can be achieved by a business model built on the basic norms of flexibility and evolution in a continuous cyclic manner. The findings show that it is possible for airlines to achieve sustained competitive advantage in highly uncertain environments by having a inherently flexible business model.

The analysis of the business model flexibility of 17 Airlines from Asia, Europe and Oceania, that is done with core competence as the indicator reveals a picture of inconsistencies in the core competence strategy of certain airlines (particularly European full service carriers) and the corresponding reduction in business performance. For an airline, having competencies in business knowledge, flight reliability, IT enabled services, catering etc will not translate in to overall service quality unless these are based on the framework of a business model that has service orientation as a distinctive core competence. Thus it can be inferred that flexibility is ingrained in airlines that are service oriented and this is obtained by an efficient core competence strategy.

Scope for further research involves the development of a model, for airlines to effectively identify the right competencies, finding the perfect mix these competencies in the business model, the resource allocation required for maintaining these competencies etc. More work is also to be done in the field of operationalizing a flexible business model in the airline industry and the change management methods required to evolve from the current industry models.

References

- Burrell, G. & Morgan, G. 1979, '*Sociological paradigms and organisational analysis: Elements of the sociology of corporate life*', Heinemann, London.
- Chatfield, A., Bjorn-Anderson, N. 1997, 'The impact of IOS enabled business process change on business outcomes: transformation of the value chain of Japan Airlines', *Journal of Management Information Systems*, vol. 14, no. 1, pp. 13–40.
- Chesbrough, H. & Rosenbloom R.S. 2002, 'The Role of the Business Model in Capturing Value from Innovation: Evidence from Xerox Corporation's Technology Spin-Off Companies', *Industrial & Corporate Change*, vol. 11, pp. 529-555.
- Doppelt, R. 2003, '*Leading change towards sustainability: A change management guide for business, government and civil society*', Greenleaf publishing, Sheffield.
- Duneavy, H. & Westermann, D. 2004, 'Future of airline revenue management', *Journal of Revenue and Pricing Management*, vol. 3, no. 4, pp. 380-383.

Economist, 1997, *Care for a downgrade?*, Retrieved 1 February, 2011, from <http://www.economist.com/node/151178>

Eriksson, H. & Penker, M. 2000, *Business Modeling with UML – Business Patterns at Work*, John-Wiley & Sons, New York.

Gronroos, C. 2006, 'Adopting a service logic for marketing', *Marketing Theory*, vol. 6, pp. 317-333.

Gummesson, E. 2008, 'Extending the service-dominant logic: from customer centricity to balanced centricity', *Journal of the Academy of Marketing Science*, vol. 36, pp. 15-17.

Hopper, T. & Powell, A. 1985, 'Making sense of research into the organizational and social aspects of management accounting: A review of its underlying assumptions', *Journal of Management Studies* vol. 22, no. 5, pp. 429–465.

Koornhof, C. 2001, 'Developing a framework for flexibility within organizations', *S.Afr.J.Bus.Management*, vol. 32, no.4, pp. 21-30.

Kotler, P., Wong, V., Saunders, J. & Armstrong, G. 2005, *Principles of Marketing*, Pearson Education, London pp. 638.

Mattsson, J. 1995, 'Services management: a holistic, multi-disciplinary and customer driven research agenda', *New Zealand Journal of Business*, vol. 17, no. 2, pp. 118.

Mcgrath, R. & MacMillan, 2009, 'How to rethink your business during uncertainty', *MITSloan Management review*, vol. 50, no.3.

Mudie, P. & Pirrie, A., 2006, *Services marketing management* Elsevier, London.

Nair, S., Palacios. M. & Ruiz, F. 2011, 'The analysis of airline business models in the development of possible future business options', *World Journal of Management*, vol. 3, no. 1, pp. 48-59.

Nunes, P. & Breen, T. 2011, 'Reinvent your business before it's too late', *Harvard Business Review* vol. 89, no. 1/2, pp. 80–87.

Oum, T.H., Park, J.H. & Zhang, A. 2000, *Globalization and strategic alliances: the case of the airline industry*, Elsevier Science, New York

Outlook Business 2011, *High stakes*, Retrieved 19 February, 2011, from <http://business.outlookindia.com/article.aspx?270570>

Parasuraman, A., Zeithaml, V.A., & Berry, L.L. 1985, 'A conceptual model of service quality and its implications for future research', *Journal of Marketing*, vol. 49, no. 4, pp. 41-50.

Patterson, P.G., 1995, 'Services management 1995-2000 and beyond: comment', *New Zealand Journal of Business*, vol. 17, no. 2, pp. 19-25.

Porter, M. 1985, *Competitive Advantage: Creating and Sustaining Superior Performance*, Free Press, New York.

- Prahalad, C. & Hamel, G. 1990, 'The core competence of the corporation', *Harvard Business Review* vol. 68, no. 3, pp. 79–91.
- Puxty, A.G. 1993, 'The social & organisational context of management accounting', *The Chartered Institute of Management Accountants Publication*, London.
- Shugan, S.M. 1994, 'Explanation for the growth of services', in Rust R.T. and Oliver, R.L. (Eds), *Service Quality: New Directions in Theory and Practice*, Sage Publications, Newbury Park, CA, pp. 223–40.
- Singapore Airlines 2011, *The SIA story*, Retrieved 20 May, 2011, from http://www.singaporeair.com/saa/en_UK/content/company_info/siastory/history.jsp.
- Skytrax 2011, *World airline star rating*, Retrieved 1 February, 2011, from <http://www.airlinequality.com/StarRanking/ranking.htm>
- Tiernan, S., Rhoades, D.L. & Waguespack, B.J. 2008, 'Airline service quality', *Managing Service Quality*, vol. 18, no. 3, pp. 212–224.
- Tsantoulis, M. & Palmer, A. 2008, 'Quality convergence in airline co-brand alliances', *Managing Service Quality*, vol. 18, no. 1, pp. 34–64.
- Vlaar, P., de Vries & Willenborg. M. 2005, 'Why incumbents struggle to extract value from new strategic options: Case of the European airline industry', *European Management Journal*, vol. 23, no. 2, pp. 54–169.
- Wensveen J.G. & Leick, R. 2009, 'The long haul low cost carrier: a unique business model', *Journal of Air Transport Management*, vol. 15, pp. 127–133.